REMARKS

The Office Action dated March 31, 2005 has been received and carefully noted. The following remarks are submitted as a full and complete response thereto. Claim 12 was previously cancelled. Claims 1-11 and 13-30 are submitted for consideration.

As a preliminary matter, the Office Action Summary page stated that claims 3, 6, 8, 13-16 and 23-30 were objected to. However, in the Detailed Action, the Office Action did not state the reasons of the objection. Furthermore, the Office Action Summary stated that this action is not final. However, page 10 of the Office Action states that the action is final. The Patent Application Information Retrieval (PAIR) system indicated that a non-final rejection was mailed on March 31, 3005. Thus, for the purpose of this Response, Applicant's representative is treating the Office Action as a non-final Office Action. Based on the above, Applicant's representative requests that the Examiner issue a new non-final Office Action that indicates the proper grounds of the objections and the proper status of the Office Action.

Claims 1, 10-11 and 21-22 were rejected under 35 U.S.C. 102(a) as being unpatentable over U.S. Patent No. 5,796,727 to Harrison et al. in view of U.S. Patent No. 6,243,581 to Jawanda. The Office Action stated that Harrison et al. teaches all of the elements of the claimed invention except for "either and IDLE mode or ACTIVE mode while the mobile remains accessible to other devices without action be a user of the mobile" as recited in claims 1, 10 and 21. However, the Office Action cites Jawanda as curing these deficiencies and stated that it would have been obvious to combine the

teachings of Harrison et al and Jawanda to yield the claimed invention. The rejection is traversed as being based on references that do not teach the combination of elements recited in claims 1, 10 and 21.

Claim 1, upon which claims 2-9 depend, recites a network architecture for Wireless Intranet Office (WIO) applications. The network includes a wireless local area network (WLAN) including a Wireless Mobile Center (WMC) arranged to serve as a WLAN access point. The network also includes a GSM network including a Mobile Station (MS) in a form of a dual-mode cellular phone to access both WLAN and GSM radio technologies, a Base Station (BS) arranged to convert a radio signal from the Mobile Station (MS) for communication, a Mobile Switching Center (MSC) arranged to establish call connection. The network further includes a Handover Module implemented in either the Mobile Station (MS) or the Wireless Mobile Center (WMC) including means for providing seamless mobility between the GSM network and the wireless LAN, when the Mobile Station (MS) roams between the GSM network and the wireless LAN, in either and IDLE mode or an ACTIVE mode while the Mobile Station (MS) remains accessible to other devices without action by a user of the Mobile Station (MS).

Claim 10, upon which claims 11 and 13-16 depend, recites a network architecture including a local radio network including a Wireless Mobile Center (WMC) arranged to serve as a access point. The network also includes a cellular network including a Mobile Station (MS) in a form of a cellular phone operable in both the local radio network and the cellular network. The network further includes a Handover Module implemented in

either the Mobile Station (MS) or the Wireless Mobile Center (WMC) including means for providing seamless mobility between the local radio network and the cellular, when the Mobile Station (MS) roams between the local radio network and the cellular network, in either and IDLE mode or an ACTIVE mode while the Mobile Station (MS) remains accessible to other devices without action by a user of the Mobile Station (MS).

Claim 21, upon which claims 22-30 depend, recites a network architecture including a first wireless network including an entity arranged to serve as an access point. The network also includes a second wireless network including a Mobile Station (MS) in a form of a portable phone operable to access the first wireless network and the second wireless network. The network further includes a Handover Module implemented in one of the first wireless network and the second wireless network including means for providing seamless mobility between the second wireless network and the first wireless network, when the Mobile Station (MS) roams between the second wireless network and the first wireless network, in either and IDLE mode or an ACTIVE mode while the Mobile Station (MS) remains accessible to other devices without action by a user of the Mobile Station (MS).

As will be presented below, the prior art references of Harrison et al. and Jawanda fails to teach or suggest the combination of elements recited in the presently pending claims.

Harrison et al. teaches a cellular system that is employed for the purpose of a wide area wireless LAN primarily to provide point to point links between a mobile station and

mobile data service controller (MDSC) which communicates through a WAN or PSTN either to another MDSC or Wide Area Bridge (WAB). The WAB provides bridging between the WAN and an establishment LAN. Col. 5, lines 8-24. When a mobile station moves between an establishment environment where it has local wireless access to the LAN and a remote environment where it has wide area wireless access, the mobile station is envisage to have a wireless modem which is capable of operation both as a cellular (outdoor) modem and a wireless LAN access (indoor) modem. Thus, as the mobile station moves from the outdoor environment to the indoor environment, communication will continue and there will come a point where the wireless LAN access modem can register with the indoor cell. Col. 11, lines 14-46.

Jawanda teaches a system that includes a wireless wide area network (WWAN) and a wireless local area network (WLAN) that are connected by an external network. Figure 4 of Jawanda shows a flowchart of a method of wireless data communication in which a data communication session is seamless handed off between the networks. A mobile terminal establishes a wireless connection with the WWAN. Datagrams may then be transferred between applications executed by the mobile terminal and applications execute by WWAN. The mobile terminal establishes a second wireless data connection by logging onto the WLAN. Thus, the user has concurrent wireless data connections with both the WWAN and WLAN. Then, a network access arbitrator causes the transfer of datagrams to be seamlessly handed off from the wireless connection with the WWAN to the wireless connection with the WLAN while maintaining the session applications. The

network access arbitrator determines whether or not the transfer of datagrams should be handed off to the connection with the WWAN, for example, in response to the mobile terminal being moved out of range of the WLAN. If the data is to be handed off, a connection with WWAN is reestablished, if a connection is not already active. The data connection with WLAN can optionally be maintained until such times as the condition that prompted the connection is no longer present.

Applicant submits that the combination of Harrison et al. and Jawanda simply does not teach or suggest the combination of elements recited in the presently pending claims. Claims 1, 10 and 21, in part recites a Handover Module implemented in one of the first wireless network and the second wireless network including means for providing seamless mobility between the second wireless network and the first wireless network, when the Mobile Station (MS) roams between the second wireless network and the first wireless network, in either and IDLE mode or an ACTIVE mode while the Mobile Station (MS) remains accessible to other devices without action by a user of the Mobile Station (MS). The Office Action correctly stated that Harrison does not teach in either and IDLE mode or an ACTIVE mode while the Mobile Station (MS) remains accessible to other devices without action by a user of the Mobile Station (MS). Although the Office Action stated that Jawanda teaches handover between the networks during ACTIVE mode and that Jawanda does not teach handover during IDLE mode as recited in claim 1, 10 and 21, the Office Action states that idle-mode handoffs are well known to those skilled in the art if the user roams from one network to another. Contrary to the

statement in the Office Action, Applicant respectfully submits that means in the mobile station for providing IDLE mode handoff while the mobile station remains accessible to other devices without action by a user of the mobile station as recited in claims 1, 10 and 21 is not obvious. The Office Action has not presented any prior art reference to support the claims that means in the mobile station for providing IDLE mode handoff while the mobile station remains accessible to other devices without action by a user of the mobile station as recited in claims 1, 10 and 21 is obvious. Absent any evidence that that means in the mobile station for providing IDLE mode handoff while the mobile station remains accessible to other devices without action by a user of the mobile station as recited in claims 1, 10 and 21 is obvious, Applicant respectfully asserts that the rejection under 35 U.S.C. §103(a) should be withdrawn because neither Harrison et al. nor Jawanda, whether taken singly or combined, teaches or suggests each feature of claims 1, 10 and 21 and hence, dependent claims 11 and 22 thereon.

Claim 2 was rejected under 35 U.S.C. 103(a) as being unpatentable over Harrison et al. and Jawanda as applied to claims 1, 11 and 22 above, and in view of U.S. Patent No. 6,230,017 to Anderson et al. The Office Action stated that Harrison et al. and Jawanda teach all of the elements of claim 2 except for attempting a location update via the WLAN and updating a new location of the mobile station at the MSC. However, the Office Action cites Anderson as curing these deficiencies and states that it would have been obvious to combine the teachings of Harrison et al., Jawanda and Anderson et al. to yield the elements of claim 2. The rejection is traversed as being based on references that

neither teaches nor suggests the combination of elements recited in claim 1.

Claim 2 is dependent on claim 1, as outlined above. Anderson et al. teaches that when a mobile station travels from an old cell to a new cell, handoff occurs and a location update operation must occur at both a HRL and a VLR. In this regard, when the mobile station travels to a new location, forced registration occurs so that the HLR is updated with the mobile switching center that is now serving the mobile station.

Applicant submits that Anderson does not cure the deficiencies of Harrison et al. or Jawanda, as outlined above. Furthermore neither Harrison et al., Jawanda and/or Anderson et al. teaches or suggests the mobile station selecting a WLAN radio and attempting a location update via the WLAN as recited in claim 2. Therefore, Applicant respectfully asserts that the rejection under 35 U.S.C. §103(a) should be withdrawn because neither Harrison et al., Anderson nor Jawanda, whether taken singly or combined, teaches or suggests each feature of claim 1 and hence, dependent claim 2 thereon.

Claims 5, 7 and 9 were rejected under 35 U.S.C. 103(a) as being unpatentable over Harrison et al. and Jawanda as applied to claims 1, 11 and 22 above, and in view of U.S. Patent No. 6,424,638 to Ray et al. The Office Action stated that Harrison et al. and Jawanda teach all of the elements of claims 5, 7 and 9 except for the mobile station measurement operations of GSM neighbor cells. However, the Office Action cites Ray et al. as curing these deficiencies and states that it would have been obvious to combine the teachings of Harrison et al., Jawanda and Ray et al. to yield the elements of claims 5, 7

and 9. The rejection is traversed as being based on references that neither teach nor suggest the combination of features recited in claim 1.

Claims 5, 7 and 9 each depend on claim 1, as outlined above. Ray et al. teaches that an Internet Gateway in a GSM network sends a list of potential target base station identities to a GSM MSC. Upon receiving the list, the GSM MSC sends a request to the mobile station asking the mobile station to transmit a measurement report from a neighboring cell back to the GSM base station. The GSM base station checks the measurement report for each potential target base station and selects the best target base station to perform handover. Col. 5, line 6-Col. 6, line 20.

Applicant submits that Ray et al. does not cure the deficiencies of Harrison et al. or Jawanda, as outlined above. Furthermore, there is no teaching or suggestion in Harrison et al., Jawanda and/or Ray et al. that when the mobile station initiates a handover from the WLAN to GSM network, the mobile station measures GSM neighbor cell, enables transmission of a handover request to the MSC via the WMC of the WLAN until the mobile station is handed over to the GSM network as recited in claim 5. Additionally, there is no suggestion or teaching of the mobile station determining if a WLAN transmission level exceeds a limit, and if it does, listing a WLAN cell first in the measurement results as recited in claim 7. There also does not seem to be any teaching of the mobile station sending an indication if a WLAN transmission level drops below a limit as recited in claim 9. Instead, Ray et al. only teaches that the mobile station transmit a measurement report that is checked for the best target base station. Therefore,

Applicant respectfully asserts that the rejection under 35 U.S.C. §103(a) should be withdrawn because neither Harrison et al., Ray et al, nor Jawanda, whether taken singly or combined, teaches or suggests each feature of claim 1 and hence, dependent claims 5, 7 and 9 thereon.

Claims 4 and 17-20 were rejected under 35 U.S.C. 103(a) as being unpatentable over Harrison et al. and Jawanda in view of Anderson et al. as applied to claims 1, 11 and 22 above, and in view of Ray et al. The Office Action stated that Harrison et al., Jawanda and Anderson et al. teach all of the elements of claims 4 and 17-20 except for the WMC informing GSM neighbor cells when the mobile station roams in IDLE mode and the mobile station selecting a GSM radio and attempting a location update. However, the Office Action cites Ray et al. as curing these deficiencies and states that it would have been obvious to combine the teachings of Harrison et al., Jawanda, Anderson et al. and Ray et alto yield the elements of claims 4 and 17-20. The rejection is traversed as being based on references that neither teaches nor suggests the combination of elements recited in claim 1, upon which claim 4 depend, and claim 17.

Claim 17, upon which claims 18-20 depend, recites a method for providing seamless mobility for a Mobile Station (MS) between a GSM network having a Base Station (BS) and a Mobile Switching Center (MSC), and a wireless local area network (LAN) have a Wireless Mobile Center (WMC) arranged to serve as a access point and linked to the Mobile Switching Center (MSC) via the LAN. The method includes the step of, during an IDLE mode in the GSM network, selecting a WLAN radio and

requesting a location update at the Mobile Switching Center (MSC), via the wireless LAN. The method also includes, alternatively in the wireless LAN, selecting a GSM radio and requesting a location update at the Mobile Switching Center (MSC) via the GSM network. The method further includes during an ACTIVE handover mode, measuring GSM neighbor cells to report a WLAN cell as an ordinary GSM cell, sending a handover request to the Mobile Switching Center (MSC) of the GSM network, via the Base Station (BS) of the GSM network, until a handover is completed in the wireless LAN. The method also includes, alternatively, measuring GSM neighbor cells and sending a handover request to the Mobile Switching Center (MSC) via the Wireless Mobile Center (WMC) of the wireless LAN, until the handover is completed in the GSM network. The Mobile Station (MS) remains accessible to other devices without action by a user of the Mobile Station (MS).

There is no teaching or suggestion in Harrison et al., Jawanda, Anderson et al. and/or Ray et al. of the mobile station selecting a GSM radio and attempting a location updates via the GSM network and a new location of the mobile station is updated at the MSC, during IDLE mode when the mobile station roams from the WLAN to the GSM network as recited in claims 4 and 17-20. There is also no teaching or suggestion in the cited references of the mobile station, during ACTIVE handover, measuring GSM neighbor cells to report a WLAN cell as an ordinary GSM cell and sending a handover request to the MSC until a handover is complete as recited in claims 17-20. Therefore, Applicant respectfully asserts that the rejection under 35 U.S.C. §103(a) should be

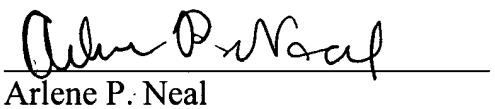
withdrawn because neither Harrison et al., Ray et al, Anderson nor Jawanda, whether taken singly or combined, teaches or suggests each feature of claim 1 and 17 and hence, dependent claims 4 and 18-20 thereon.

As noted previously, claims 1-11, 13-30 recite subject matter which is neither disclosed nor suggested in the prior art references cited in the Office Action. It is therefore respectfully requested that all of claims 1-11, 13-30 be allowed and this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicant's undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicant respectfully petitions for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



Arlene P. Neal
Registration No. 43,828

Customer No. 32294
SQUIRE, SANDERS & DEMPSEY LLP
14TH Floor
8000 Towers Crescent Drive
Tysons Corner, Virginia 22182-2700
Telephone: 703-720-7800
Fax: 703-720-7802

APN:kmp

Enclosures: Petition for a Three-Month Extension of Time